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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|-------------------------------|------------------|
| 10/814,689                       | 03/31/2004  | Anthony D. Cristillo | 502615.20013                  | 8605             |
| 26418                            | 7590        | 06/11/2008           | EXAMINER                      |                  |
| REED SMITH, LLP                  |             |                      | HUMPHREY, LOUISE WANG ZHIYING |                  |
| ATTN: PATENT RECORDS DEPARTMENT  |             |                      | ART UNIT                      | PAPER NUMBER     |
| 599 LEXINGTON AVENUE, 29TH FLOOR |             |                      |                               |                  |
| NEW YORK, NY 10022-7650          |             |                      | 1648                          |                  |
|                                  |             | MAIL DATE            |                               | DELIVERY MODE    |
|                                  |             | 06/11/2008           |                               | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |   |
|------------------------------|--------------------------------------|---|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/814,689 | <b>Applicant(s)</b><br>CRISTILLO ET AL. |
|                              | <b>Examiner</b><br>LOUISE HUMPHREY   | <b>Art Unit</b><br>1648                 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

#### Status

- 1) Responsive to communication(s) filed on 10 March 2008.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 13-24 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) 13-24 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 29-38 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1668)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 October 2007 has been entered.

**DETAILED ACTION**

This Office Action is in response to the amendment filed 10 March 2008. Claims 1-12 and 25-28 have been cancelled. Claims 29-38 have been added. Claims 13-24 and 29-38 are pending. Claims 13-24 are drawn to a nonelected subject matter and hence are withdrawn from further consideration pursuant to 37 CFR 1.142(b).

Claims 29-38 are currently examined.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The rejection of claims 1-7, 9-12, 26 and 27 under 35 U.S.C. §102(b) as being anticipated by González *et al.* (1996) is **withdrawn** in response to Applicant's cancellation of the claims.

The rejection of claims 1-6, 10-12, 27 and 28 under 35 U.S.C. §102(b) as being anticipated by Yuan *et al.* (1996) is **withdrawn** in response to Applicant's cancellation of the claims.

The rejection of claims 1-6, 10-12, 25 and 27 under 35 U.S.C. §102(b) as being anticipated by Wilk *et al.* (2001) is **withdrawn** in response to Applicant's cancellation of the claims.

The rejection of claims 1-12, 25 and 27 under 35 U.S.C. §102(b) as being anticipated by Royer *et al.* (1996) is **withdrawn** in response to Applicant's cancellation of the claims.

However, the rejection over González *et al.* (1996) applies to the new claims 29-33.

#### ***Response to Arguments***

Applicants' arguments filed on 10 March 2008 have been fully considered but are not persuasive. Applicants' response has condensed the traversal of the four prior art rejections into one general discussion rather than directing arguments to each specific rejection. This renders unclear the relevance of each argument to each ground of rejection of record. Therefore, Applicants' arguments have been addressed to the extent that they read on each of the four rejections under 35 U.S.C. §102.

Applicants argue that none of the references teaches a budding mediating motif consisting of any of the claimed amino acid sequence. Examiner respectfully disagrees. Applicants cannot disregard the other limitations "a DNA molecule comprising a nucleic acid comprising a deletion mutation of the budding mediating motif" preceding the closed language "consisting of." González clearly teaches a nucleic acid comprising the deletion of a budding mediating motif consisting of PTAP.

Applicants further argue that none of the references discloses a budding mediating motif comprising either PPX<sub>1</sub>Y, wherein X<sub>1</sub> is not P, or YX<sub>2</sub>X<sub>3</sub>L. Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

#### **NEW REJECTIONS NECESSITATED BY AMENDMENT**

Claims 29-33 are rejected under 35 U.S.C. §102(b) as being anticipated by González *et al.* (1996, hereinafter "González").

The instant claims are drawn to a DNA molecule comprising a nucleic acid encoding a deletion mutation of a retroviral Gag protein budding mediating motif consisting of PTAP (SEQ ID NO:1); a vector comprising the DNA molecule; and a composition comprising either the DNA molecule or the vector.

González teaches a plasmid comprising SIV nucleic acid comprising a deletion mutation of the C-terminus of the *gag* gene comprising the budding mediating motif consisting of PTAP, according to Figure 1. The deletion mutant nucleic acid is introduced into a vector also comprising the coding sequence for the SIV protease. See

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page 6385, left column and Figure 1. Thus, the instant invention is anticipated by González.

Claims 29-38 are rejected under 35 U.S.C. §102(b) as being anticipated by Puffer *et al.* (1997, hereinafter "Puffer").

The instant claims are drawn to a DNA molecule comprising a nucleic acid encoding a deletion mutation of a retroviral Gag protein budding mediating motif comprising or consisting of YX<sub>2</sub>X<sub>3</sub>L (SEQ ID NO:3); a vector comprising the DNA molecule; and a composition comprising either the DNA molecule or the vector.

Puffer teaches a DNA construct or PCR fragment comprising a nucleic acid encoding a deletion mutation of Equine Infectious Anemia Virus (EIAV) Gag protein budding motif consisting of YX<sub>2</sub>X<sub>3</sub>L (SEQ ID NO:3). The PCR fragment is cloned into a plasmid vector. See abstract and page 6542, left column, "Materials and Methods," and Figure 1. Thus, the instant invention is anticipated by Puffer.

#### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louise Humphrey whose telephone number is 571-272-5543. The examiner can normally be reached on Mon-Fri, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell, can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. H./  
Examiner, Art Unit 1648

/Bruce Campbell/  
Supervisory Patent Examiner, Art Unit 1648